

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1–12. (Canceled)

13. (Currently Amended) A battery pack comprising: a battery; a circuit substrate having a charge/discharge safety circuit and arranged on one end face of the battery; and an end case in which an external connection terminal is set, wherein

the circuit substrate is arranged inside the end case, the end case includes attachment holes at both ends thereof extending therethrough and each attachment hole includes a step near the bottom end thereof, and the end case is secured to the battery by screws, each with a screw head, the screw head extending through a respective attachment hole and engaging with the step in the attachment hole in the end case at both ends and tips of the screws being engaged into the end face at both ends of the battery.

14. (Previously Presented) The battery pack according to claim 13, wherein: the battery case serves as an electrode terminal of one polarity and an electrode terminal of the other polarity is provided on the end face in the battery; and one end of a safety protection device is connected to the electrode terminal in the end face of the battery case and the other end of the safety protection device is connected to the circuit substrate.

15. (Previously Presented) The battery pack according to claim 13, wherein: the battery case serves as an electrode terminal of one polarity and an electrode terminal of the other polarity is provided on the end face in the battery; a first connection bracket having an upright portion is secured to the end face of the battery case; a connection plate that makes surface contact with the upright portion of the first connection bracket and that is partly connected to the circuit substrate is arranged on the inner side of one side wall of the end case; and the upright portion and the connection plate are welded together through an aperture formed in one side wall of the end case opposite the upright portion.

16. (Previously Presented) The battery pack according to claim 14, wherein: second and third connection brackets having upright portions that overlap each other are secured to the other end of the safety protection device and the circuit substrate, respectively; and the upright portions of the second and third connection brackets are welded together through an aperture opened in the end case.

17. (Previously Presented) The battery pack according to claim 13, wherein the external connection terminal set in the end case is of the type that establishes or shuts connection between the battery and a device to be connected by a connector on the device side being inserted or removed.

18. (Currently Amended) A battery pack comprising: a battery, a circuit substrate having a charge/discharge safety circuit and arranged on one end face of the battery; and an end case in which an external connection terminal is set, wherein

the circuit substrate is arranged inside the end case, the end case includes attachment holes at both ends thereof extending therethrough and each attachment hole includes a step near the bottom end thereof, and the end case is secured to the battery by coupling pins with heads, the heads of the coupling pins extending through a respective attachment hole and engaging with the step in the attachment hole in the end case at both ends and the tips of the coupling pins being secured to the end face at both ends of the battery.

19. (Previously Presented) The battery pack according to claim 18, wherein the end face of the battery at least in a portion thereof to which the tip of the coupling pin is attached is provided with the same type of material as the coupling pin.

20. (Previously Presented) The battery pack according to claim 19, wherein the end face of the battery in a portion opposite the tip of the coupling pin is provided with the same type of material as the coupling pin.

21. (Previously Presented) The battery pack according to claim 18, wherein: the battery case serves as an electrode terminal of one polarity and an electrode terminal of the other polarity is provided on the end face in the battery; and one end of a safety protection device is connected to the electrode terminal in the end face of the battery case and the other end of the safety protection device is connected to the circuit substrate.

22. (Previously Presented) The battery pack according to claim 18, wherein: the battery case serves as an electrode terminal of one polarity and an electrode terminal of the other polarity is provided on the end face in the battery; a first connection bracket having an upright portion is secured to the end face of the battery case; a connection plate that makes surface contact with the upright portion of the first connection bracket and that is partly connected to the circuit substrate is arranged on the inner side of one side wall of the end case; and the upright portion and the connection plate are welded together through an aperture formed in one side wall of the end case opposite the upright portion.

23. (Previously Presented) The battery pack according to claim 21, wherein: second and third connection brackets having upright portions that overlap each other are secured to the other end of the safety protection device and the circuit substrate, respectively; and the upright portions of the second and third connection brackets are welded together through an aperture opened in the end case.

24. (Previously Presented) The battery pack according to claim 18, wherein the external connection terminal set in the end case is of the type that establishes or shuts connection between the battery and a device to be connected by a connector on the device side being inserted or removed.

25. (Currently Amended) A battery pack comprising: a battery; a circuit substrate having a charge/discharge safety circuit and arranged on one end face of the battery; and an end case in which an external connection terminal is set, wherein

the circuit substrate is arranged inside the end case, the end case includes attachment holes at both ends thereof extending therethrough and each attachment hole includes a step near the bottom end thereof, and the end case is secured to the battery by a coupling pin with heads, the heads extending through a respective attachment hole and engaging with the step in the attachment hole in the end case, such that the material forming the end face of the battery bites into a recess formed in an outer periphery at the tip of the coupling pin to secure the tip of the coupling pin to the end face of the battery.

26. (Previously Presented) The battery pack according to claim 25, wherein: the coupling pin includes a protrusion at the tip that has the recess in its peripheral surface; the end face of the battery includes a hole to which the protrusion at the tip of the coupling pin fits; and with the protrusion being fitted in the hole, the tip of the coupling pin and the end face of the battery are joined together by resistance welding.

27. (Previously Presented) The battery pack according to claim 25, wherein: the battery case serves as an electrode terminal of one polarity and an electrode terminal of the other polarity is provided on the end face in the battery; and one end of a safety protection device is connected to the electrode terminal in the end face of the battery case and the other end of the safety protection device is connected to the circuit substrate.

28. (Previously Presented) The battery pack according to claim 25, wherein: the battery case serves as an electrode terminal of one polarity and an electrode terminal of the other polarity is

provided on the end face in the battery; a first connection bracket having an upright portion is secured to the end face of the battery case; a connection plate that makes surface contact with the upright portion of the first connection bracket and that is partly connected to the circuit substrate is arranged on the inner side of one side wall of the end case; and the upright portion and the connection plate are welded together through an aperture formed in one side wall of the end case opposite the upright portion.

29. (Previously Presented) The battery pack according to claim 27, wherein: second and third connection brackets having upright portions that overlap each other are secured to the other end of the safety protection device and the circuit substrate, respectively; and the upright portions of the second and third connection brackets are welded together through an aperture opened in the end case.

30. (Previously Presented) The battery pack according to claim 25, wherein the external connection terminal set in the end case is of the type that establishes or shuts connection between the battery and a device to be connected by a connector on the device side being inserted or removed.